Name _____

4th Grade Science Remote Learning Packet

Week 12

Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

_____ _____

(Parent Signature) (Date)

Parents please note that all academic are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.


Brighter Choice
Charter School for Boys
Day # 1

Name: _____Week 12 Day 1 Date: _____

BCCS-B **Howard** **Morehouse** **Hampton**

Guided Notes

Day 2: Exploration 11: *Notes-*_____
_____
_____
_____

EXIT TICKET: So now that we've completed the experiment and had our discussion, why did it take you so long to catch the ruler? _____
_____
_____

Why couldn't you catch it as soon as you saw the ruler being dropped? _____
_____
_____
_____

Do you think you can catch a dollar bill (or a paper the same shape and size) before it drops to the ground, explain your answer? Be sure to think of the experiment and use the words sensory nerves and movement nerves. _____
_____
_____
_____

Name: _____Week 12 Day 1 Date: _____

BCCS-B **Howard** **Morehouse** **Hampton**

THINK

Record your results

Trial	Number on ruler
Trial #1	cm
Trial #2	cm
Trial #3	cm

RULE #1
Droppers must hold the ruler so the 1 cm mark is between the Catchers' fingers.

RULE #2
Catchers can't move until they see the ruler drop.

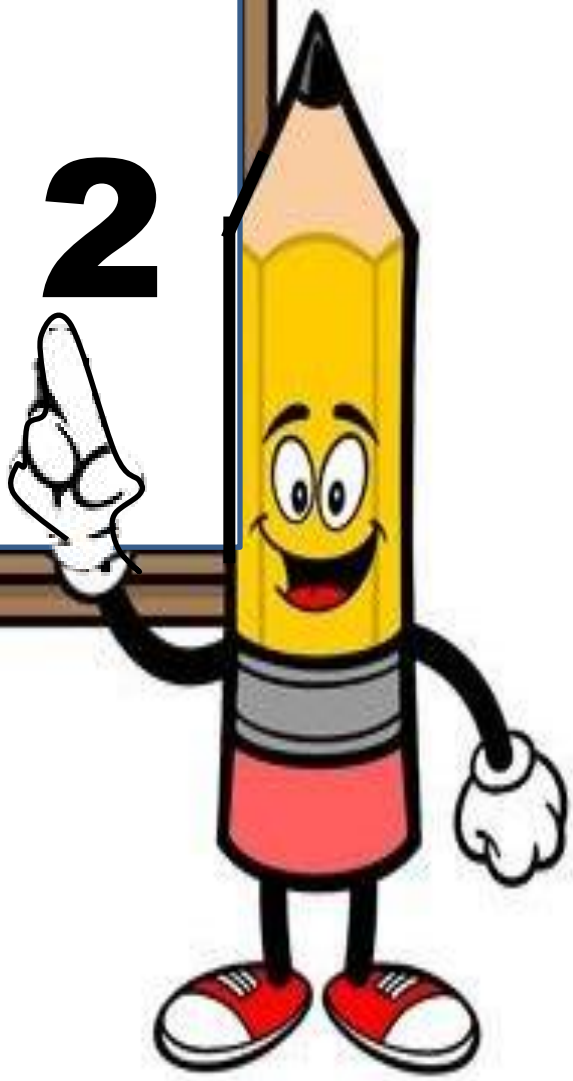
Circle the picture by your fastest reaction time

Picture	Distance on ruler	Time it takes for the ruler to fall this far	That's the same time it takes...
	0 - 5 cm	less than 100 milliseconds	...for a ROCKET SHIP to travel a ½ mile
	6 - 10 cm	100 to 140 milliseconds	...for a BLINK of an eye
	11 - 15 cm	140 to 180 milliseconds	...for a LIGHTNING BOLT to travel 10 miles
	16 - 20 cm	180 to 200 milliseconds	...for a CHEETAH to run 20 feet
	21 - 25 cm	200 to 230 milliseconds	...for a SNAP of the fingers
	26 -30 cm	230 to 250 milliseconds	...for a RACE CAR to drive 85 feet

1000 milliseconds = 1 second

Brighter Choice
Charter School for Boys

Day # 2



Name: _____Week 12 Day 2 Date: _____

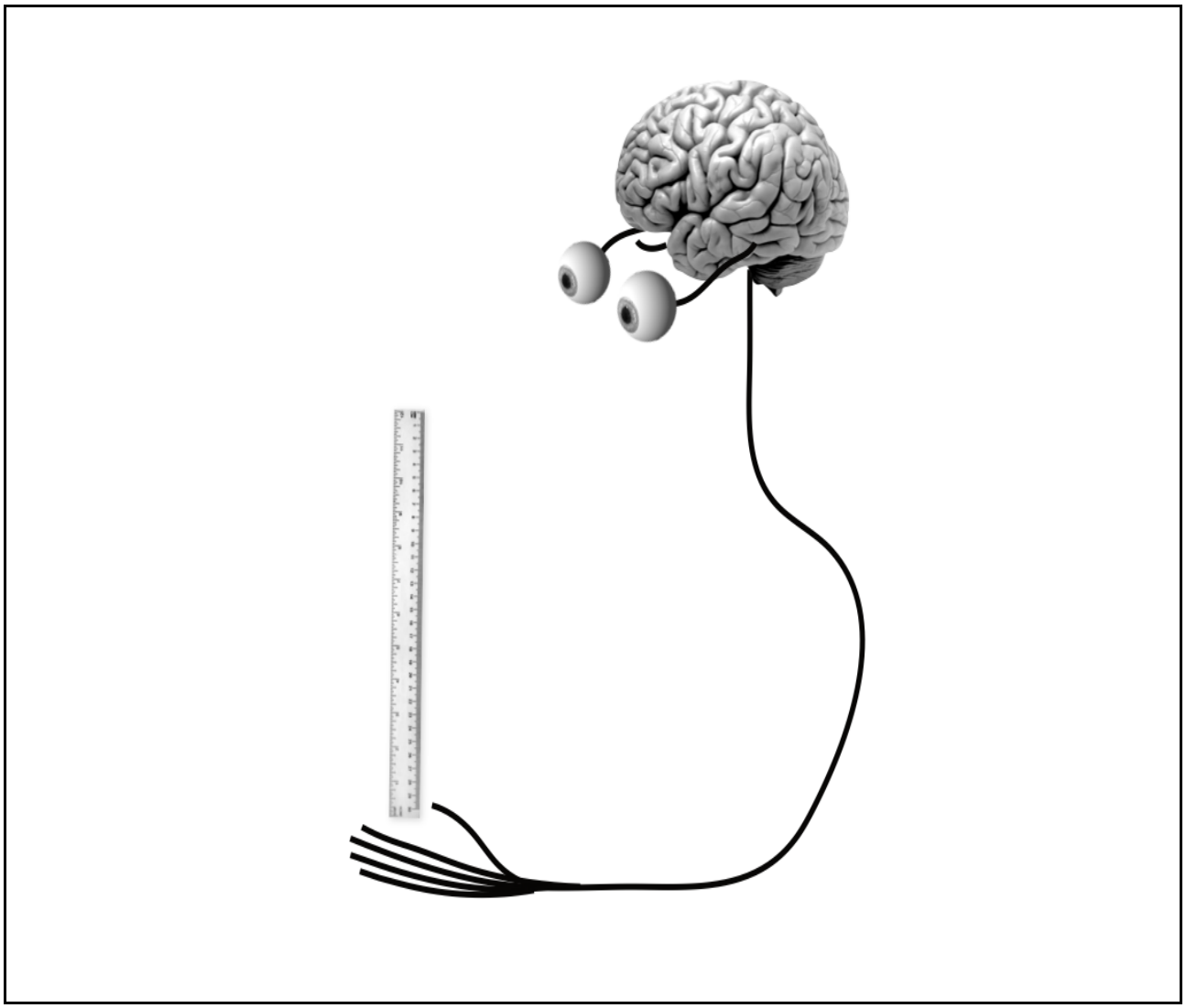
BCCS-B Howard Morehouse Hampton

End of Mystery Assessment

1. Why does it look like you have a hole in your hand when you try the hole-in-hand illusion?
   a. Your hand has a hole.
   b. It looks like that because your brain sees out of both eyes.
   c. It doesn't look like there is a hole in your hand.
   d. Your hand looks regular.

2. What is the difference between your movement nerves and your sensory nerves? What do they do?
   a. The movement and sensory nerves are the same.
   b. The movement and sensory nerves work together.
   c. Your movement nerves connect to your muscles. Your sensory nerves connect to your senses.
   d. Your movement nerves connect to your senses. Your sensory nerves connect to your muscles.

3. On the drawing below, add arrows and words to explain what happened as you did the “Reaction Time” activity.



Brighter Choice
Charter School for Boys

Day # 3

Name: _____Week 12 Day 3 Date: _____

BCCS-B **Howard** **Morehouse** **Hampton**

Guided Notes: Human Machine

The Question: *Answer the question in a complete sentence.*

What has been the most interesting thing you have learned during this unit, Human Machine?

_____
_____
_____

Day 1:

All About Your Body | Human Body Compilation: *Take notes during the video of important that you think would be important for you to remember and be successful on your unit assessment Wednesday.*

_____
_____
_____
_____
_____
_____

Vocabulary: *Fill in the blanks with the colored word from the PowerPoint presentation.*

1. **Ligament:** a _____ piece of _____ in your body that holds bones together or keeps an organ in place
2. **Tendon:** the _____ that _____ a muscle to a bone
3. **Joint:** the place where two _____ and can move
4. **Muscle:** the _____ part of any _____
5. **Biceps:** the name of the _____ that moves your lower _____
6. **Skeleton:** what we call all the _____ together; the _____ of a body
7. **Stomach:** the _____ in your body where _____ goes and begins to be _____ after you swallow it
8. **Dissection:** when scientists _____ something open to _____ how a living thing _____
9. **Cornea Lens:** the _____ layer in _____ of the eye
10. **Retina:** the '_____' at the _____ of the eye
11. **Sensory Nerves:** send _____ from the _____ to the _____
12. **Movement Nerves:** send _____ from the _____ to the _____

EXIT TICKET: *Complete with a partner or alone. Write the letter of the definition that matches the vocabulary word on the blank line.*

_____ 1. ligament

_____ 2. dissection

_____ 3. muscle

_____ 4. stomach

_____ 5. tendon

_____ 6. cornea lens

_____ 7. joint

_____ 8. sensory nerves

_____ 9. biceps

_____ 10. skeleton

_____ 11. retina

_____ 12. movement nerves

a) a tough piece of tissue in your body that holds bones together or keeps an organ in place
b) a string that connects a muscle to a bone
c) the place where two bones meet and can move
d) the meat part of any animal
e) the name of the muscle that moves your lower arm
f) what we call all the bones together; the structure of a body
g) the organ in your body where food goes and begins to be digested after you swallow it
h) when scientists cut something open to figure out how a living thing works
i) the clear layer in front of the eye
j) the 'screen' at the back of the eye
k) send messages from the senses to the brain
l) send messages from the brain to the muscle

13. Which nerve system sends a message to the brain? _____

_____

14. Describe what happens in the nervous system when a thirsty dog sees a puddle of water on the floor?

_____

_____

_____

_____

15. I have an idea for a robot. My robot only has rods. It's going to be called "Super Cleaner!" It's going to move so fast to get my chores complete in just a matter of minutes. Do you agree that "Super Cleaner" is going to be able to complete my chores? Support your argument with reasoning.

_____

_____

_____

_____

16. Why do some animals have large pupils and other animals have smaller pupils?

_____

_____

_____

_____

_____

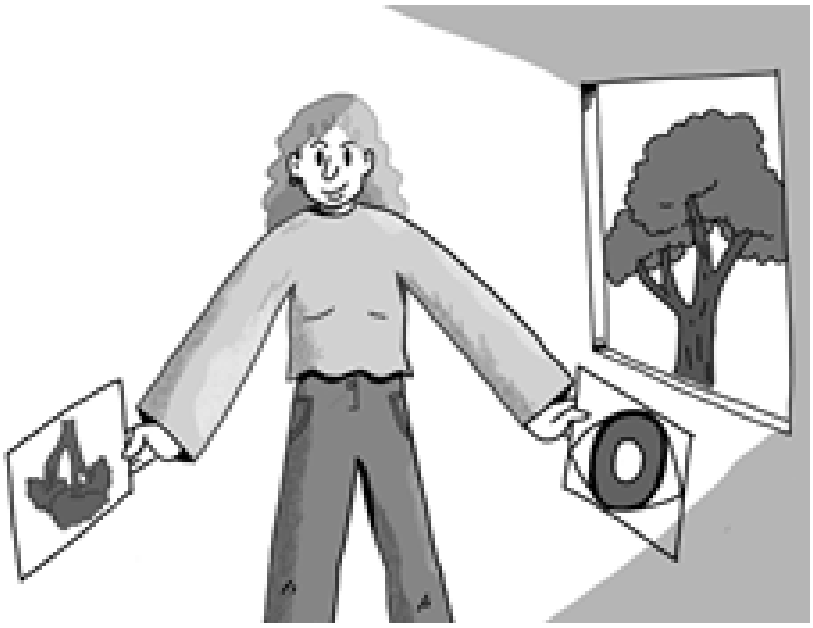

Brighter Choice
Charter School for Boys
Day # 4

Name: _____Week 12 Day 4 Date: _____

BCCS-B **Howard** **Morehouse** **Hampton**

Unit Assessment

1. In the picture below, Shira is using a model of an eye to get an image of a tree on the model retina. Draw arrows that show the path that light takes to get the image onto the model retina.



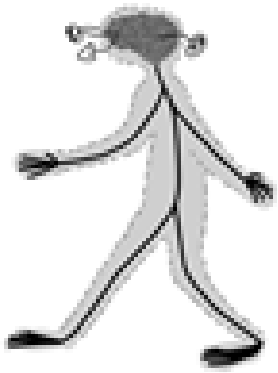
2. In the above picture, if the tree image on the model retina is blurry and fuzzy, what is something that Shira could do to make the image crisp and clear?

a. Shira can remove the cornea lens from the eye model.
b. Shira can darken the room to let less light through.
c. Shira can change the distance between the retina and the cornea lens.
d. Shira can change the color of the iris.

3. If Shira tries to use her eye model at 10:00 pm at night, what do you think will happen?

a. The eye model will work just as well as it did during the day.
b. The eye model won't work as well because there won't be as much light to illuminate objects.
c. The eye model won't work as well because the pupil is too big and lets too much light through.

Human Machine Vocabulary



Fill in each blank below by choosing the best word from this Vocabulary List:

ligament	tendon	biceps
dissection	cornea lens	skeleton
muscle	joint	retina
stomach	sensory nerves	movement nerves

1. _____ is the meat part of any animal.

2. A _____ is the string that connects a muscle to a bone.

3. A _____ is the place where two bones meet and can move.

4. _____ is when scientists cut something open to figure out how a living thing works.

5. _____ is the name of the muscle that moves your lower arm.

6. A _____ is what we call all the bones together. It is the structure of a body.

7. The _____ is the "screen" at the back of the eye.

8. The _____ is the clear layer in front of the eye.

9. _____ send messages from the brain to the muscles.

10. _____ send messages from the senses to the brain.